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What's Your Radiographic Diagnosis?

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Local infections, seen commonly as necrotic or ulcerative stomatitis or mouth rot are usually due to *Pseudomonas* or *Aeromonas*. It is the most common specific infection in snakes. It appears as edema and erythema of the gingiva and usually has a history of trauma. Secondary osteomyelitis is a common sequelae in chronic infections. Dr. Bernstein feels it is mandatory to use systemic chemotherapy along with local debridement and topical antibiotics. He has found that Aureomycin in the drinking water (0.5gm/gal.) or chloromycetin (25mg/lb.) has been effective. Ascorbic acid at the rate of 10–30mg/day is also recommended.

Bacterial pneumonia is the primary disease of the respiratory system. *Pseudomonas* and *Aeromonas* are again the most common agents. Signs of pneumonia are anorexia, lethargy and bubbling from the mouth. Maintaining good nutrition, chloromycetin therapy and elevation of environmental temperature often give rewarding results.¹

Parasitic Diseases

Parasitic diseases are common in reptiles. Many forms of external parasites infect reptiles, but the most common is the snake mite, *Ophionyssus*. These can transmit diseases and cause death by exsanguination. Shell No Pest Strips have been found to be very effective in eliminating the parasite.

Reptiles are also hosts to a variety of intestinal helminths which on a fecal flotation would resemble those of mammals and birds. Thiabendazole (20mg/lb.), Piperazine (40mg/lb.) and Dichlorvos (12.5 mg/lb.) daily for two doses are effective. For turtles, divide weight by 2.¹

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What's Your Radiographic Diagnosis?

by

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History:

This bitch had an ovariohysterectomy at the Stange Memorial Clinic in December 1972 when she was 6 months old. She went home apparently normal. She was presented at the clinic on March 24th, 1973 because she was vomiting and depressed. She had been seen ingesting a leather glove and some hay. Radiographs made at this time showed an acute intestinal obstruction. On March 26th a

piece of a sock was removed from the duodenum and a similar object was removed from the jejunum. The two pieces were joined by a length of yarn. Recovery from the surgery was uneventful and she was discharged from the clinic on March 29th. She was presented again at the clinic late on March 31st because she was again vomiting. As she did not appear to be unduly distressed, she was given symptomatic treatment on April 1st. On April 2nd a barium meal was given, and among others, the illustrated radiographs were made. What is your radiographic diagnosis?

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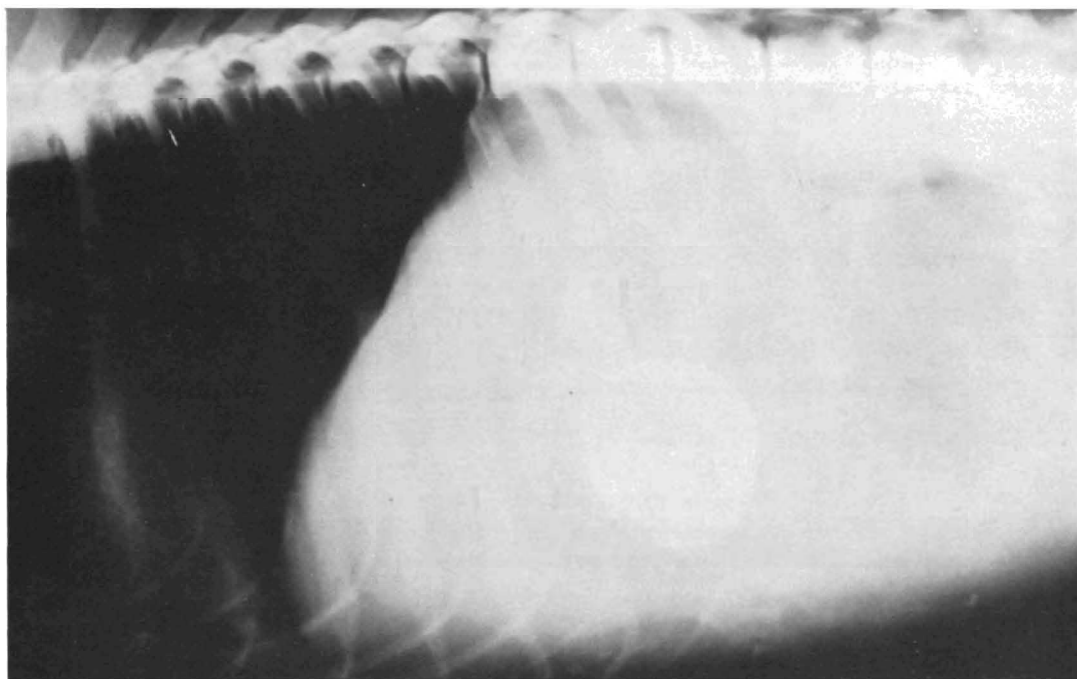


FIG. 1. Immediately after barium administration.

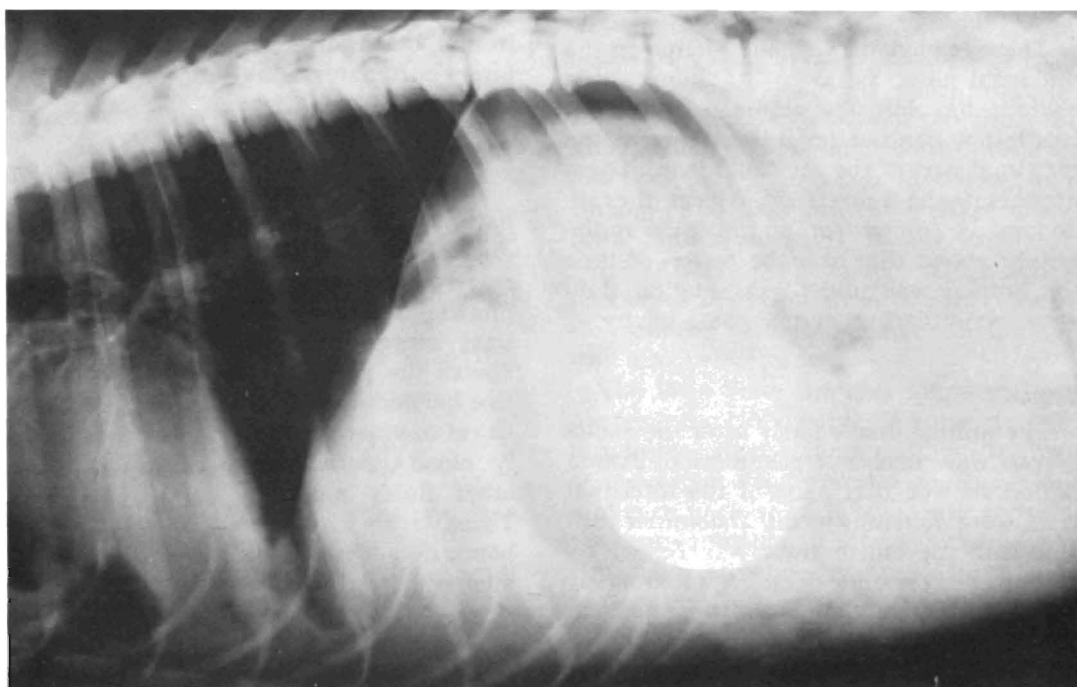


FIG. 2. One hour after barium administration.

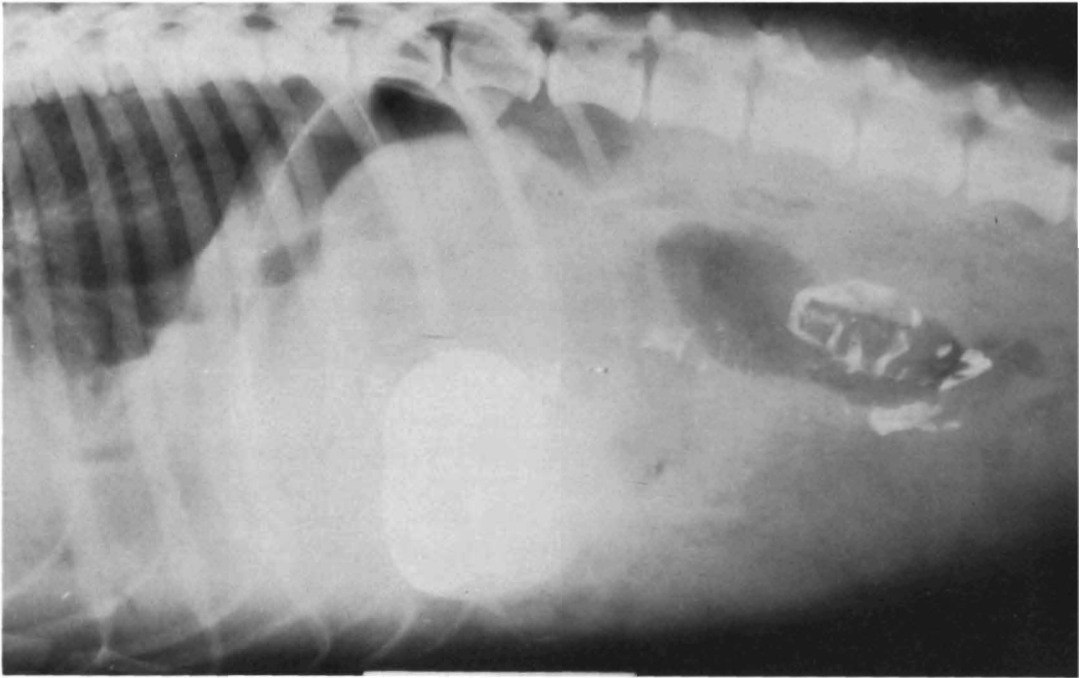


FIG. 3. Three and one-half hours after barium administration.

Diagnosis:

There is obviously an obstruction in the duodenal area as after 3½ hours little barium has left the stomach and what has left it has not progressed beyond the proximal part of the duodenal loop. There appears to be some fluid within the abdomen. A comparison of the three radiographs shows that over the period of time the animal was under examination fluid was accumulating in the chest cavity.

Sequel:

The animal died shortly after the radiographs were made. A post-mortem examination showed that parts of the intestinal tract were adherent to the abdominal incision and the entire tract was fused together by tight adhesions. Approximately 450 mls of unclotted blood were present in the abdominal cavity and about 400 mls within the chest cavity. There were multiple intramuscular, subperitoneal and subdural hematomas. Very high levels (4

parts per million) of warfarin were found in the blood, liver and kidneys by thin layer chromatography and gas chromatography.

Discussion:

It would appear that the animal must have had access to warfarin after she was discharged from the hospital. Usually a massive dose is required to produce such profuse hemorrhages. Following intestinal surgery the gut may more readily absorb the poison as some of the protective barriers are attenuated or absent and bowel motility is reduced. Radiographically blood cannot be distinguished from other fluids produced within the body. There is no evidence of intra-pulmonary hemorrhage which is sometimes associated with warfarin poisoning.

Acknowledgment:

We are indebted to Dr. J. P. Kluge and Dr. W. B. Buck for the post-mortem examination and the chemical analysis.